

REMARKS

The claims have been amended to more clearly define the invention as disclosed in the written description. In particular, claims 1, 3-5, 8 and 9 have been amended for clarity.

The Examiner has rejected claims 1-4 and 6-9 under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 5,987,142 to Courneau et al. The Examiner has further rejected claims 5 and 10 under 35 U.S.C. 103(a) as being unpatentable over Courneau et al.

The Courneau et al. patent discloses a system of sound spatialization and method personalization for the implementation thereof, in which sound signals representative of a respective number of sources are processed such that they appear from particular positions to a user of the system.

The subject invention relates to a data representation apparatus which provides, to a user of the apparatus, an audio signal processed such that it seems to originate from different spatial positions depending on the value of a positionless data signal. This is described in the specification on page 8, line 27 to page 9, line 5, in which the data representation apparatus may be arranged in an MP3 player where the positionless data signal relates to the pace of the user. In one embodiment, a beep may be added to the music being reproduced, the spatial positioning of the beep being indicative to the user of his/her pace, the position directly in front of the user indicating he/she is running at his/her desired pace.

As indicated in MPEP § 2131, it is well-founded that "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Further, "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

The Examiner now states:

"Courneau disclose a data representation apparatus and a corresponding method for representing data (the location of the speech of the co-pilot) by means of an audio signal, said data representation apparatus comprising: an audio processing unit for delivering the audio signal with a characteristic dependent upon a data signal (the signal representing the position of the pilot's head) having at least a first value and a second value; and a mapping unit for mapping the first value of the data signal (together with co-pilot's signal) to a first position (e.g. to the left of the pilot) in three-dimensional space, and the second value of the data signal (together with co-pilot's signal) to a second position (e.g. to the back of the pilot) in three-dimensional space, wherein the audio processing unit changes the characteristic of the audio signal (the apparent location of the co-pilot), resulting in the audio signal appearing, to a user (pilot) listening to the audio signal, to originate from the first position when the data signal has the first value, and from the second position when the data signal has the second value."

Applicants submit that the Examiner is mistaken. In particular, while Courneau et al. discloses mapping of a data signal to spatial locations, this data signal is not "positionless" as specifically indicated in the claim. Rather, the data signal in

question in Courneau et al. is the position of the pilot's head which is directly related to the direction from which the co-pilot's voice originates. Applicants stress that this is not a meaningless limitation. Rather, as described in the specification on page 3, line 32 to page 4, line 3, the data signal is a positionless measure, e.g., time. A further example is given on page 8, line 27 to page 9, line 4, where the data signal represent the pace at which a jogger is jogging. Hence, a mapping of this data signal to positions is necessary. In Courneau et al., since the "data signal" is the position of the pilot's head, there is no need for mapping in that the relative position of the pilot's head to the co-pilot's voice are known.

Applicants therefore submit that Courneau et al. neither discloses nor suggests "an audio processing unit for delivering the audio signal with a characteristic dependent upon a positionless data signal having at least a first value and a second value" and "a mapping unit for mapping the first value of the positionless data signal to a first position in three-dimensional space, and the second value of the positionless data signal to a second position in three-dimensional space, wherein the audio processing unit changes the characteristic of the audio signal, resulting in the audio signal appearing, to a user listening to the audio signal, to originate from the first position when the positionless data signal has the first value, and from the second position when the positionless data signal has the second value".

In view of the above, Applicants believe that the subject invention, as claimed, is neither anticipated nor rendered obvious by the prior art, either individually or collectively, and as such, is patentable thereover.

Applicants believe that this application, containing claims 1-10, is now in condition for allowance and such action is respectfully requested.

Respectfully submitted,

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